

New Evidence on the Determinants of Foreign Direct Investments in Emerging Markets: A Panel Data Approach

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ABSTRACT

The main goal of the current study is to investigate how conventional and institutional factors affect foreign direct investment in particular global emerging markets. The study specifically seeks to determine the impact of GDP Growth, Population Growth, Level of Inflation, Trade Openness, Voice and Accountability, Rule of Law, Control of Corruption, Political Stability, and Government Effectiveness (which are institutional determinants) on FDI Inflows towards the Global Emerging Markets. To approach the research question a panel regression analysis has been applied by leveraging annual data from 18 countries, namely Angola, Brazil, Chile, China, Colombia, Egypt, Ghana, India, Indonesia, Malaysia, Mexico, Nigeria, Peru, Philippines, Singapore, South Africa, South Korea and Vietnam. Findings show that inflation and GDP have a significant and positive effect on the FDI inflows, while Voice and Accountability is significant but negative towards the examined variable.

KEYWORDS: Foreign Direct Investments, Emerging Markets, Panel Regression Analysis

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1. INTRODUCTION

There is a plethora of theoretical literature on the topic of how multinational corporations (MNCs) respond to governance that may be used to explain the factors that influence foreign direct investments (FDIs). For over 20 years, the concept of domestic institutional quality has been employed to explain cross-country variations in growth rate, and the same idea has been applied to FDIs. In fact, foreign direct investments account for a sizable portion of capital formation, particularly in emerging nations, which are increasingly popular as investment destinations because of their great potential for profitability. The significance of FDIs has been demonstrated in recent development tales by the fact that they introduce new technology, provide employment opportunities, and increase tax revenues available to the government.

The quantity of FDI a nation will attract initially appears to be favorably connected with excellent governance. Using the research of Kaufmann et al. (1999), governance is defined as the collection of customs and institutions that enable the exercise of power [1]. Li (2005) argues that "an independent judiciary and legislature, fair and open laws with

impartial enforcement, trustworthy public financial information, and strong public confidence" are all necessary components of good governance [2]. Several factors might explain the potential positive correlation between institutions' quality and FDI inflows. First, efficient infrastructure increases output. On the other hand, poor governance will result in higher expenses.

This has been shown in the case of corruption in particular. Furthermore, MNCs investing in countries with poor governance bear the risk of uncertainty, notably due to the possibility of expropriations. Yet, there hasn't been much empirical research done on how institutional and economic factors affect FDIs, particularly globally. Thus, the scope of this study is to investigate the effect of traditional and institutional determinants of Foreign Direct Investments towards selected Global Emerging Markets. In particular, the study aims to identify the effect of GDP Growth, Population Growth, level of Inflation, Trade Openness (which constitute the traditional determinants), Voice and Accountability, Rule of Law, Control of Corruption, Political Stability and

Government Effectiveness (which are the institutional determinants) on FDI Inflows towards the Global Emerging Markets.

The remainder of this paper is structured as follows: Section 2 depicts the previous empirical findings regarding the selected determinants on FDI Inflows. Section 3 analyzes the data and econometric methodology used for this study. Section 4 presents the results of our estimation. Finally, Section 5 concludes our study and includes certain suggestions for further research.

2. LITERATURE REVIEW

Considering the previous empirical research, certain parameters have significantly attracted the scientific interest. First and foremost, GDP Growth can be considered as the most important determinant of FDI Inflows. It must be noted that extensive empirical evidence supports the positing and significant effect of GDP Growth on FDI Inflows (Glegg and Scott-Green, 1999; Kumar and Pradhan, 2002; Mold, 2003; Casi and Resmini, 2010). Fast growing markets could indicate the growing purchasing power of the local consumers (for B2C sales) and businesses (for B2B sales) leading to growing profits. As a result, these markets can be considered as highly attractive for FDI Inflows [3]. Glegg and Scott-Green (1999) also support the positive relationship between GDP Growth and FDI Inflows, as increasing demand can lead to economies of scale, decreasing the production costs and thus increasing profit margins [4]. Furthermore, Filippaios and Papanastasiou (2008) support that GDP growth reflects a country's future prospects, affecting positively and significantly FDI Inflows [5].

Inflation is also proven to be one of the most crucial determinants of FDI Inflows. It must be noted that inflation rates can either reflect a country's growing consumption or financial instability. In the first case, inflation rates show the countries growing productivity and consumption, which leads to economies of scale, affecting positively the FDI Inflows [6]. On the contrary, high Inflation Rates can be caused by economic instability [7]. As a result, FDI Inflows are negatively affected by high Inflation Rates [8]. Moreover, high Inflation rates do not allow companies (including MNEs) to set a set specific prices for their products, while the cost for raw materials and other production factors are affected as well, creating an uncertainty around the overall production cost and profitability. For instance, Addison and Heshmati (2003), by examining the effect of various determinants of FDI Inflows towards developing countries, found that Inflation rates have a negative and significant effect on the dependent

variable, as unstable macroeconomic policies can lead to high inflation rates, which result to decreasing FDI Inflows [9]a.

Population Growth is also suggested to have significant effect on FDI Inflows. Population Growth reflects the market growth in terms of number of consumers, creating a growing pool of potential buyers of products and services. Through FDI Inflows, MNEs aim to establish long term presence in countries with growing population, to take advantage of the needs of growing population. By examining the FDI Inflows towards developing countries, Nunnenkamp (2002) proved the positing and significant effect of Population Growth on FDI Inflows [10]. Cobrin (2005), Akin (2009) and Wadhwa and Reddy (2011) also suggest that Population Growth is one of the most important parameters, affecting positively the FDI Inflows towards host countries with growing population [11–13]. On the contrary, Tampakoudis et. al. (2017) identified that Population Growth can have negative and significant effect on FDI Inflows. According to this particular study, population growth leads to decreasing per capita income (and disposable income), negatively affecting FDI Inflows [14].

Trade Openness is also considered as an important parameter of FDI Inflows, as it reflects a country's ease of importing and exporting goods and services [15]. In particular, Basar and Tosunoglu (2006), Won et al. (2008) and Law and Habibullah (2009) suggest that trade openness positively affects the FDI Inflows [16–18]. MNEs wish to produce but also export their products from the host economy to neighboring countries, making trade openness one of the most decisive factors. But, certain previous research suggest that there is a negative relationship between Trade Openness and FDI Inflows. Asiedu (2002) suggests that trade restrictions (which decreases trade openness) may lead to growing FDI Inflows, which substitute the international trade between countries [19]. Liargovas and Skandalis (2012) also support the “tariff – jumping” hypothesis, according to which MNEs decide to avoid paying tariffs by establishing production units in the host economies, which results to a negative relationship between Trade Openness and FDI Inflows [20].

Infrastructure is also a parameter with inconclusive effect on FDI Inflows. Certain studies suggest that Infrastructure positively affects FDI Inflows, as it lowers production, communication and transportation costs, leading to growing profit margins [15,19,21,22]. Bartlett and Ghoshal (1998) also support that communication between subsidiaries and the parent company is important, making MNEs to

evaluate the quality of the telecommunication network in candidate host countries[23]. Contrarily, certain academics support that low infrastructure quality can lead to increasing investments. Marr (1997) argues that infrastructure needs could boost FDI Inflows for Infrastructure projects, leading to growing FDI Inflows in other sectors. It must be noted that China and Nigeria have build strong relations as Nigeria is in need of developed infrastructure, leading to growing FDI Inflows from China to Nigeria between 2003 to 2006.

Furthermore, previous empirical research has identified certain political determinants which have attracted the scientific interest. A host country's level of corruption is considered as an important factor which affects FDI Inflows. In particular, it is suggested that high corruption increases the operational cost for both subsidiaries of MNEs but also local businesses. High corruption also means high uncertainty which hinders a host country's attractiveness [24]. Castro & Nunez (2013) also suggest that corruption affects employment, the competition in the market and economic growth, and thus the overall attractiveness of an economy. On the contrary, Hausmann & Fernandez-Arias (2000) proved that level of corruption has insignificant effect on FDI Inflows [25]. According to their study, policymakers focus on the attractiveness of the host country in terms of inflation, economic growth etc. and neglect to reduce the levels of corruption. Daude & Stein (2007) and Jadhav (2012) also pointed out the same relationship [26,27].

Government Effectiveness is also one of the political parameters with inconclusive effect on FDI Inflows. This particular determinants reflects the absence of discrimination in terms of implementation of political decisions and that equality prevails in the host country. Globerman & Shapiro (2003), Gani (2007) and Méon & Sekkat (2007) suggest that Government Effectiveness has a positive and significant effect on the FDI Inflows, as MNEs are ensured that there will be no political decisions in favor of the local businesses (and against MNEs) [28–30]. On the contrary, Hausmann & Fernandez-Arias (2000) suggest that this particular determinant has insignificant effect on FDI Inflows [25]. According to their study, MNEs mostly take into consideration the growth and size of the candidate host countries, while government effectiveness is a factor of minor importance.

The stable and productive legal framework of the host country is also considered as a parameter of major importance. The impartiality of the country's legal framework suggests that the laws are applied fairly

and the private property is secured, which leads to the attractiveness of a host country [28]. Alexander (2014) suggests that the effectiveness of a host country's legal system is of critical importance for MNEs, as the latter are ensured that their investments are legally protected in the long term. Asiedu (2006), Gani (2007), Jadhav (2012), Castro & Nunez (2013) and Akpan et al., (2014) also suggest that Rule of Law has positive and significant effect on the FDI Inflows [19,27,29]. On the contrary, certain scholars suggest that Rule of Law has insignificant effect on FDI Inflows. By analyzing the FDI Inflows towards 96 different countries during the period 1990 – 2000, Méon & Sekkat (2007) identified that Rule of Law has insignificant effect on the dependent variable [30]. Hausmann & Fernandez-Arias (2000) and Daude & Stein (2007) also concluded to the same result [25,26].

Political stability and absence of violence and terrorism is regarded as a crucial determinant of FDI Inflows. The absence of political turbulence and a stable political climate positively affects FDI Inflows as MNEs understand that there will not be any crucial political events which will affect their operations and the overall economy. Kobrin (1976) proved that political stability positively affects FDI Inflows [11,31]. According to this particular researcher, MNEs avoid entering to politically unstable markets, as radical political decision may affect their operations through changes in taxation, etc. Globerman & Shapiro (2002), Gani (2007) and Méon & Sekkat (2007) also pointed out that political stability affects positively the FDI Inflows [28–30]. On the contrary, certain academics suggest that political stability has insignificant effect on FDI Inflows. For instance, Jadhav (2012) suggested that political stability has non crucial effect on FDI Inflows, while Hausmann & Fernandez-Arias (2000) and Daude & Stein (2007) suggested that political stability has a non-significant effect on the operations of MNEs [25–27].

Finally, Voice and Accountability is considered one of the political determinants which has significant effect on FDI Inflows. This variable demonstrates the presence of institutions that facilitate citizens' control of government actions, which is considered of high importance for MNEs [26]. Buchanan et al. (2012) suggest that this variable has positive and significant effect on FDI Inflows, as high levels of accountability of a host country's central government leads to decrease of uncertainty in the local market [32]. On the other hand, Cuervo-Cazurra (2006) and Jadhav (2012) suggest that this variable has negative and significant effect on the FDI Inflows, as MNEs from countries with low levels of Voice and Accountability

select similar countries in order to take advantage of their experience on this type of political environment [27,33–36].

3. DATA AND METHODOLOGY

3.1. Data

In order to provide empirical evidence regarding the effect of the selected variables on FDI inflows towards the Developing Countries, we leverage annual data from 18 countries, namely Angola, Brazil, Chile, China, Colombia, Egypt, Ghana, India, Indonesia, Malaysia, Mexico, Nigeria, Peru, Philippines, Singapore, South Africa, South Korea and Vietnam. The selection of the countries was based on the classification of these economies as Developing in the World Investment Report published by the United Nations (UNCTAD, 2022) and the availability of complete data for the selected variables (both dependent and independent). The

sample period runs from 2002 to 2020 (19 years in total). All data are sourced from The World Bank (World Development Indicators and World Governance Indicators).

3.2. Estimation model

This study uses Foreign Direct Investments (as % of GDP) as dependent variable, and specific independent variables, which can be divided into traditional and institutional determinants of Inward FDI. The Traditional Determinants include GDP Growth, Population Growth, an Infrastructure proxy (number of telephone lines per 100 people), Inflation and Trade Openness. The Institutional Determinants include Voice and Accountability, Rule of Law, Control of Corruption, Political Stability and Government Effectiveness. The table below depicts the name, the symbol and the description of each variable.

TABLE I. DESCRIPTION OF THE VARIABLES

Variable Name	Symbol	Description
FDI Inflows	INFDI	Foreign Direct Investments, net inflows (as % of GDP)
GDP Growth	GDPGR	GDP Growth (annual %)
Inflation	INF	Inflation, consumer prices (annual %)
Population Growth	POPGR	Population Growth (annual % change)
Trade Openness	OPENNESS	The sum of annual imports and exports (as a % of GDP)
Telephone Lines	TLINES	Number of telephone lines per 100 people
Control of Corruption	COR	Percentile Rank. The variable captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.
Government Effectiveness	GOV	Percentile Rank. The variable captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
Rule of Law	LAW	Percentile Rank. The variable captures perceptions of the extent to which citizens and businesses have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.
Political Stability	POL	Percentile Rank. The variable measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism.
Voice and Accountability		Percentile Rank. The variable captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as the presence of institutions that facilitate citizens' control of government actions, etc.

Furthermore, for the purpose of this study, a Panel Data Ordinary Least Square model is used. In particular, our estimations are based on the following equation:

$$INFDI_{i,t} = \beta_0 + \beta_1 * GDPGR_{i,t} + \beta_2 * INF_{i,t} + \beta_3 * POPGR_{i,t} + \beta_4 * OPENNESS_{i,t} + \beta_5 * TLINES_{i,t} + \beta_6 * COR_{i,t} + \beta_7 * GOV_{i,t} + \beta_8 * LAW_{i,t} + \beta_9 * POL_{i,t} + \beta_{10} * VOICE_{i,t} + \varepsilon_{i,t} \quad (1)$$

where i refers to the countries under examination, t to the selected time period 2002–2020 and ε is the error term.

It must be noted that panel data have the advantages of being more informative data. Panel data also provide more variability, less collinearity, more efficient estimations and more degrees of freedom [14,17,37].

3.3. Preliminary econometrics analysis

In order to evaluate the stationarity of the selected variables, the Levin et al. (2002), Im et al. (2003) and Fisher-ADF panel unit root tests are used (Maddala and Wu, 1999). The results of the panel unit root tests are included in the following TABLE II:

TABLE II. PANEL UNIT ROOT TESTS

Variable	Method	Level		1 st Difference	
INFDI	Levin, Lin & Chu	-4.95	0.00		
	Im, Perasan & Shin W - stat	-4.50	0.00		
	ADF – Fisher Chi - square	86.78	0.00		
GDPGR	Levin, Lin & Chu	6.12	1.00	0.12	0.54
	Im, Perasan & Shin W - stat	1.69	0.95	-6.05	0.00
	ADF – Fisher Chi - square	21.27	0.97	104.26	0.00
INF	Levin, Lin & Chu	-10.44	0.00		
	Im, Perasan & Shin W - stat	-7.57	0.00		
	ADF – Fisher Chi - square	132.50	0.00		
POPGR	Levin, Lin & Chu	-6.94	0.00		
	Im, Perasan & Shin W - stat	-8.90	0.00		
	ADF – Fisher Chi - square	233.08	0.00		
OPENNESS	Levin, Lin & Chu	-0.66	0.25	-8.45	0.00
	Im, Perasan & Shin W - stat	0.07	0.53	-7.23	0.00
	ADF – Fisher Chi - square	33.74	0.57	118.48	0.00
TLINES	Levin, Lin & Chu	-1.00	0.15	-6.09	0.00
	Im, Perasan & Shin W - stat	1.17	0.87	-5.13	0.00
	ADF – Fisher Chi - square	27.17	0.85	94.39	0.00
COR	Levin, Lin & Chu	0.25	0.60	-4.20	0.00
	Im, Perasan & Shin W - stat	0.76	0.77	-5.78	0.00
	ADF – Fisher Chi - square	29.29	0.77	100.58	0.00
GOV	Levin, Lin & Chu	-0.80	0.21	-4.22	0.00
	Im, Perasan & Shin W - stat	0.01	0.50	-7.18	0.00
	ADF – Fisher Chi - square	35.98	0.46	118.85	0.00
LAW	Levin, Lin & Chu	0.20	0.58	-6.47	0.00
	Im, Perasan & Shin W - stat	1.22	0.88	-7.06	0.00
	ADF – Fisher Chi - square	22.30	0.96	116.34	0.00
POL	Levin, Lin & Chu	-2.36	0.00	-6.11	0.00
	Im, Perasan & Shin W - stat	-1.59	0.05	-8.37	0.00
	ADF – Fisher Chi - square	48.84	0.07	136.50	0.00
VOICE	Levin, Lin & Chu	-0.02	0.48	-8.46	0.00
	Im, Perasan & Shin W - stat	0.74	0.77	-8.56	0.00
	ADF – Fisher Chi - square	30.30	0.73	144.37	0.00

According to Table II, INFDI, INF and POPGR are stationary, since the unit root tests do not reject the null hypothesis of unit root at 1%, 5% and 10% level of significance. On the contrary, all the other variables (OPENNESS, TLINES, COR, GOV, LAW, POL and VOICE) are found stationary in their first differences. As a result, and in order to conclude to more accurate results, we use the first differences of the non – stationary variables.

4. RESULTS AND DISCUSSION

Table III reports the results of the pairwise correlation matrix. This process allows us to identify the existence of multicollinearity. It must be noted that in the pairwise correlation matrix, we include the first differences of the non – stationary variables.

TABLE III CORELLATION MATRIX

		1	2	3	4	5	6	7	8	9	10	11
1	INFDI	1.000										
2	Δ GDPGR	0.031	1.000									
3	INF	-0.038	-0.085	1.000								
4	POPGR	-0.078	-0.027	0.511	1.000							
5	Δ OPENNESS	0.001	0.128	0.022	-0.125	1.000						
6	Δ TLINES	-0.070	0.004	0.061	0.021	0.064	1.000					
7	Δ COR	-0.039	-0.017	0.002	0.018	-0.049	-0.061	1.000				
8	Δ GOV	0.033	0.031	-0.024	-0.050	0.025	-0.000	0.200	1.000			
9	Δ LAW	0.013	-0.026	0.055	-0.008	-0.024	0.012	0.094	0.223	1.000		
10	Δ POL	0.015	-0.024	0.079	0.065	0.039	0.009	0.029	0.083	0.211	1.000	
11	Δ VOICE	-0.151	0.058	0.036	0.055	-0.001	0.012	0.162	0.001	0.123	0.106	1.000

According to Table 3, none of the correlation coefficients takes significantly high value. As a result, multicollinearity is not considered as a problem.

For the empirical estimation of our study, we can choose between Pooled Ordinary Least Square (Pooled OLS), Fixed Cross Section Effects (FE) and Random Cross Sector effects (RE). But, the Pooled OLS method does not take into consideration the differences between the countries, while it does not depict if the response of FDI inflows in conjunction with the independent variables over a specific time period is the same for all countries. As a result, the Pooled OLS method is not considered as a good fit for our study (Asteriou and Hall, 2007; Gujarati et al., 2012; Kumari and Sharma, 2017) [37–39].

In order to choose between FE and RE estimation methods, we leverage the Hausman Test (Hausman, 1976). The null hypothesis of the test is that FE and RE estimators are similar, which leads to the fact that RE estimation is more appropriate. By taking into consideration the results from our panel estimation, the null hypothesis of the test is rejected ($X^2 = 29.53$ with p – value = $0.00 < 0.05$). As a result, the Hausman test indicates that the FE estimation method is more suitable.

Considering the preliminary econometrics analysis (unit root tests, pairwise correlation and Hausman Test) we then proceed to the application of the selected econometric methodology, which allows us to examine the effect of the selected independent variables on FDI inflows. Table 4 depicts the results of the panel OLS estimation with fixed effects.

TABLE IV PANEL OLS ESTIMATION WITH FIXED EFFECTS

Dependent Variable: INFDI			
Method: Panel Least Squares			
Sample (adjusted): 2003 2020			
Total Panel (balanced) observations: 324			
C	5.080017	0.515560	0.0000
Δ GDPGR	0.068216	0.040903	0.0964
INF	0.169157	0.023136	0.0000
POPGR	-1.496664	0.322257	0.0000
Δ OPENNESS	-1.598357	1.426065	0.2633
Δ TLINES	0.108015	0.102955	0.2950
Δ COR	-0.012811	0.033189	0.6998
Δ GOV	0.041461	0.035319	0.2414
Δ LAW	-0.013484	0.043053	0.7543
Δ POL	0.033716	0.028655	0.2403
Δ VOICE	-0.187277	0.048900	0.0002
R - Squared	0.811075	F-statistic	47.06508
Adj. R - Squared	0.793842	Prob(F-statistic)	0.000000
S.E. of regression	2.310877	Durbin-Watson stat	1.403774

By considering the empirical results of our estimations, we highlight that GDP Growth (Δ GDPGR) Inflation (INF), Population Growth (POPGR), and Voice and Accountability (Δ VOICE) have significant statistical significance on FDI Inflows (INFDI). On the contrary, Trade Openness (Δ OPENNESS), Telephone Lines (Δ TLINES), Control of Corruption (Δ COR), Government Effectiveness (Δ GOV), Rule of Law (Δ LAW) and Political Stability (Δ POL) re found to have insignificant effect on the independent variable.

In particular, GDP Growth is found to have positive and significant effect (at 10% level of significance) on FDI inflows, which is in line with previous empirical findings (Nigh, 1985; Kumar and Pradhan, 2002; Filippaios and Papanastasiou, 2008; Delitheou, 2011). High GDP Growth rates increase the income levels in the host economies, triggering significant demand for products and services. On the other hand, MNEs can leverage economies of scale and strong profit margins. High profitability is the core parameter of the decision making for international expansion. It also must be noted that developing host countries need to promote reforms which could lead to sustainable growth.

Furthermore, Inflation also has positive and significant effect (at 1% level of significance) on the dependent variable. This result also agrees with certain studies (Mason and Vracheva, 2017). According to Agudze & Ibhagui (2021), a price level increase is revitalizing for a host economy, ensures that investors will receive significant investment returns, which encourages FDI inflows [40]. Furthermore, inflation rates reflect the increasing consumption of the host economies. It also must be noted that this particular result is in contrast to the empirical results from Sabir et al. (2019) who found that Inflation rates have insignificant effect on FDI inflows towards developing countries.

In contrast with the two previous results, Voice and Accountability has negative and significant effect (at 1% level of significance) on FDI inflows. According to this result, MNEs are negatively affected by the improvement in Voice and Accountability. This result implies that FDI inflows from countries with low Voice and Accountability prefer potential host economies with similar characteristics, as they are more familiar with this type of political environment [27,33]. It also must be noted that this result is in contrast with the findings of Globerman & Shapiro (2002), Méon & Sekkat (2007), Buchanan et al. (2012) and Akpan et al. (2014) who identified that Voice and Accountability has positive and significant effect on FDI inflows, and Hausmann & Fernandez-

Arias (2000) and Gani (2007) who suggest that this particular parameter has insignificant effect on the dependent variable [25,29,30,32].

Furthermore, Population Growth was also found to have negative and significant effect (at 1% level of significance) on the dependent variable. A growing population decreases GDP per capita and, consequently the purchasing power of the local consumers, which makes MNEs skeptical around the profitability of a potential direct investment. This result is in line with Wadhwa & Reddy (2011), Akin (2009), Al-Sadig (2009) and Tampakoudis et al. (2017) who proved that Population growth is one of the determinants which affect negatively the FDI inflows [12–14].

Finally, certain variables were found to have insignificant effect on FDI inflows, namely Trade Openness, Infrastructure (Telephone Lines), Corruption, Government Effectiveness, Rule of Law and Political Stability. These results indicate that these particular variables do not affect FDI inflows.

5. CONCLUSIONS

The importance of foreign direct investments as a source of funding for emerging nations has been noted. FDI has aggressively recruited by establishing and maintaining a very favorable investment climate through significant reforms that simplify the process of starting a firm, obtaining financing, paying taxes, etc.

A regulatory framework, registration facilities and requirements, business changes, closures, disclosure requirements, and other facilities like a working permit, government protection of investments, dispute resolution, money transfers, special economic zone facilitations, public-private partnerships, etc. are all included in the package for promoting investment. Findings of the current study reveals the relationship between FDI and GDP is favorable, and it has been noted that FDI was crucial to the expansion of the economy. An important factor in a nation's long-term growth was foreign direct investment. Also, results show that Voice and Accountability had a considerable negative influence, suggesting that this characteristic negatively facilitates FDI intake.

References

- [1] D. Kaufmann, A. Kraay, and P. Zoido-Lobaton, *Governance Matters* (1999).
- [2] X. Li, X. Liu, X. Li, and X. Liu, *World Dev.* 33, 393 (2005).
- [3] V. D. Ancharaz, *J. Afr. Econ.* 12, 417 (2003).
- [4] J. Clegg and Scott-Green, *J. Common Mark. Stud.* 37, 597 (1999).

- [5] F. Filippaios and M. Papanastassiou, J. Common Mark. Stud. 46, 969 (2008).
- [6] S. Sayek, South. Econ. J. 76, 419 (2009).
- [7] K. Upadhyaya, Econ. Fac. Publ. (2007).
- [8] C. A. Yartey and C. K. Adjasi, *Stock Market Development in Sub-Saharan Africa: Critical Issues and Challenges* (2007).
- [9] T. Addison, A. Heshmati, T. Addison, and A. Heshmati, (2003).
- [10] P. Nunnenkamp, *Determinants of FDI in Developing Countries: Has Globalization Changed the Rules of the Game?* (Kiel Institute for the World Economy (IfW Kiel), 2002).
- [11] S. J. Kobrin, Transnatl. Corp. 14, 67 (2005).
- [12] M. Akin, Int. Symp. Sustain. Dev. (2009).
- [13] K. Wadhwa and Sudhakara Reddy, Int. J. Bus. Manag. 6, (2011).
- [14] I. A. Tampakoudis, D. N. Subeniotis, I. G. Kroustalis, and M. I. Skouloudakis, Mediterr. J. Soc. Sci. 8, 58 (2017).
- [15] S. Onyeiwu and H. Shrestha, J. Dev. Soc. 20, 89 (2004).
- [16] M. Basar and S. Tosunoglu, Manag. Glob. Transitions 4, 115 (2006).
- [17] Y. Won, F. S. T. Hsiao, T. Yang, and Taeoe Kyöngje Chöngch'aek Yöñ'guwöñ, Korea Inst. Int. Econ. Policy 1 (2008).
- [18] S. H. Law and M. S. Habibullah, South African J. Econ. 77, 45 (2009).
- [19] E. Asiedu, World Dev. 30, 107 (2002).
- [20] P. Liargovas, Soc. Indic. Res. 106, 323 (2012).
- [21] J. B. Ang, J. Econ. Surv. 22, 536 (2008).
- [22] S. Straub and A. Terada-Hagiwara, *ADB Economics Working Paper Series Infrastructure and Growth in Developing Asia* (2010).
- [23] C. Bartless and B. Ghoshal, *Managing Across Borders: The Transnational Solution* (2002).
- [24] A. Al-Sadig, Cato J. 29, 267 (2009).
- [25] R. Hausmann and E. Fernandez-Arias, Res. Dep. Publ. (2000).
- [26] C. Daude and E. Stein, Econ. Polit. 19, 317 (2007).
- [27] P. Jadhav and V. Katti, Poverty & Public Policy 4, 49 (2012).
- [28] S. Globerman and D. Shapiro, J. Int. Bus. Stud. 34, 19 (2003).
- [29] A. Gani, Appl. Econ. Lett. 14, 753 (2007).
- [30] P. G. Méon and K. Sekkat, Econ. Inq. 46, 227 (2008).
- [31] S. J. Kobrin, J. Conflict Resolut. 20, 497 (1976).
- [32] B. G. Buchanan, Q. V. Le, and M. Rishi, Int. Rev. Financ. Anal. 21, 81 (2012).
- [33] A. Cuervo-Cazurra, J. Int. Bus. Stud. 37, 807 (2006).
- [34] K. Ragazou, I. Passas, and A. Garefalakis, Adm. Sci. 12, (2022).
- [35] K. Ragazou, I. Passas, and G. Sklavos, Sustain. 14, (2022).
- [36] K. Ragazou, I. Passas, A. Garefalakis, E. Zafeiriou, and G. Kyriakopoulos, Energies 15, (2022).
- [37] D. N. Gujarati, *Basic Econometrics*, 4th ed. (McGraw-Hill Companies, 2004).
- [38] D. Asteriou and S. G. Hall, *Applied Econometrics: A Modern Approach Using EViews and Microfit* (Palgrave Macmillan, 2007).
- [39] A. Kumari and A. K. Sharma, World Dev. Perspect. 5, 30 (2017).
- [40] K. Agudze and O. Ibhagui, Int. Rev. Appl. Econ. 35, 749 (2021).